

#### Front Cover:

The background image is a three-dimensional representation of hyper-polarized <sup>3</sup>He gas diffusing over time. Shown in the foreground are a series of dynamic proton radiographs of detonating high explosives (left column) as well as a schematic of the illumination geometry of a Nova laser hohlraum below an image of the corresponding plasma instabilities observed in the irradiation chamber (center column).

#### **Back Cover:**

Shown in the foreground are a simulation of an imploding target on the Pegasus II Pulsed-Power Facility (lower left) and a magnetoencephalographically generated image of brain activity in the cerebral cortex (upper left).

Art direction and cover design by Donald Montoya, Group CIC-1.

The four most recently published reports in this series, unclassified, are LA-12336-PR, LA-12501-PR, LA-12804-PR, and LA-13048-PR.

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# Physics Division Progress Report

January 1, 1995-December 31, 1996

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## **Physics Division Progress Report**

January 1, 1995-December 31, 1996

### **Abstract**

This issue of the Physics Division Progress Report describes progress and achievements in Physics Division research during the period January 1, 1995–December 31, 1996. The report covers the five main areas of experimental research and development in which Physics Division serves the needs of Los Alamos National Laboratory and the nation in applied and basic sciences: (1) biophysics, (2) hydrodynamic physics, (3) neutron science and technology, (4) plasma physics, and (5) subatomic physics. Included in this report are a message from the Division Director, the Physics Division mission statement, an organizational chart, descriptions of the research areas of the five groups in the Division, selected research highlights, project descriptions, the Division staffing and funding levels for FY95–FY97, and a list of publications and presentations.

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